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IN THE CLAIMS:

Please cancel claims 2 and 31.

Please add new claims 34, 35, and 36.

Please amend claims 1, 3, 9, 12, 21, 27, and 32 as follows:

-- 1(currently amended). A communication circuit for use within a vehicle, the circuit comprising:

- a first network port; and
- a second network port located remote from the first network port and ~~digitally~~ connected thereto, wherein the first and second network ports are digitally connected to one another via an IEEE 802.3 digital link and using Internet Protocol so as to enable high speed audio and video signal communication ~~for digitally communicating a signal~~ therebetween.

2(cancelled). ~~The circuit, according to claim 1, in which the first network port and the second network port are connected by a digital link.~~

3 (currently amended). The circuit, according to ~~claim 2~~ claim 1, in which the first network port is connected to a first network segment and the second network port is connected to a second network segment.

4(original). The circuit, according to claim 3, in which a third network segment is connected between the first network segment and the second network segment.

5(original). The circuit, according to claim 4, in which each network segment includes a multi-port network hub, the first and second network ports being connected to their respective multi-port network hubs.

6(original). The circuit, according to claim 5, in which at least one peripheral network communication device is connected to each of the multi-port network hubs.

7(original). The circuit, according to claim 6, in which at least one peripheral network communication device is a control head.

8(original). The circuit, according to claim 7, in which at least one peripheral communication device is connected to the control head.

9(currently amended). The circuit, according to claim 8, in which each multi-port network hub is a multi-port ~~ETHERNET™~~ IEEE 802.3 network hub.

10(original). The circuit, according to claim 9, in which the first, the second and the third network segments define a first Local Area Network.

11(original). The circuit, according to claim 10, in which the first, second and third network segments are respectively first, second and third Local Area Network subsystems.

12(currently amended). The circuit, according to claim 11, in which the digital link ~~is an ETHERNET™ digital link~~ provides for at least a 1-Mbps signal communication speed within the circuit.

13(original). The circuit, according to claim 12, in which a train includes at least two vehicles connected together by a coupler, the first Local Area Network being located in one vehicle, a second Local Area Network being located in the other vehicle.

14(original). The circuit, according to claim 13, in which the first Local Area Network includes a first interface and the second Local Area Network includes a second interface.

15(original). The circuit, according to claim 14, in which the first interface is a control unit having a digital link receiver port and a wire connector connected to the first network port.

16(original). The circuit, according to claim 15, in which at least one of the vehicles is sectioned and articulated.

17(original). The circuit, according to claim 16, in which the coupler includes a digital link integral therewith.

18(original). The circuit, according to claim 17, in which the digital link is an RS-485 connection.

19(original). The circuit, according to claim 18, in which the control unit includes a plurality of peripheral device connector ports.

20(original). The circuit, according to claim 19, in which the peripheral communication device include sign units, emergency intercoms, public address amplifiers, radio systems, consoles or laptop computers.

21(currently amended). A communication circuit for use on board a train having at least two vehicles coupled together, the circuit comprising:

- a first Local Area Network having a first interface and located in one vehicle; and
- a second Local Area Network having a second interface and located in the other vehicle; ~~and~~

- ~~the first,~~ wherein the first interface and the second interface ~~being~~ are digitally connected to one another by a RS-485 digital link and using a Local Area Network Internet Protocol-based protocol so as to enable high speed audio and video signal communication ~~for digitally communicating a signal~~ between the first and the second Local Area Networks.

22(original). The circuit, according to claim 21, in which each of the Local Area Networks includes first, second and third Local Area Network subsystems.

23(original). The circuit, according to claim 22, in which each Local Area Network subsystems includes a multi-port network hub.

24(original). The circuit, according to claim 22, in which at least one peripheral network communication device is connected to the multi-port network hub.

25(original). The circuit, according to claim 24, in which at least one peripheral network communication device is a control head.

26(original). The circuit, according to claim 25, in which at least one peripheral communication device is connected to the control head.

27(currently amended). The circuit, according to claim 25, in which the multi-port network hub is an ~~ETHERNET™~~ IEEE 802.3 hub.

28(original). The circuit, according to claim 27, in which the first interface is a control unit having a digital link receiver port and a wire connector connected to the multi-port network hub.

29(original). The circuit, according to claim 28, in which the control unit includes a plurality of peripheral device connector ports.

30(original). The circuit, according to claim 29, in which the digital link is integral with a coupler coupling the two train vehicles.

31(cancelled). ~~The circuit, according to claim 30, in which the digital link is an RS-485 connection.~~

32(currently amended). The circuit, according to ~~claim 31~~ claim 30, in which at least one of the cars is sectioned and articulated.

33(original). The circuit, according to claim 32, in which the peripheral communication device include sign units, emergency intercoms, public address amplifiers, radio systems, consoles or laptop computers.

34(new). The circuit, according to claim 25, wherein a software program controls the local area networks and the RS-485 digital link and allows for connection and disconnection of the peripheral network communication device without interrupting operation, and thereby without requiring re-initialization, of the local area networks and the circuit.

35(new). The circuit, according to claim 21, wherein a software program monitors the health status of the Local Area Networks.

36(new). The circuit, according to claim 23, wherein the multi-network hub is configured for connection of a laptop computer thereto and enabling configuration of the local area networks from the laptop computer. --.